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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/505,282	08/20/2004	Mikio Ikenishi	330-281	5541
23117 7590 02/28/2008 NIXON & VANDERHYE, PC 901 NORTH GLEBE ROAD, 11TH FLOOR ARLINGTON, VA 22203				
EXAMINER				
FALASCO, LOUIS V				
ART UNIT		PAPER NUMBER		
1794				
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02/28/2008		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

DETAILED ACTION

Papers Received

1. The Arguments filed 02/07/08 are acknowledged.

Claims

2. The claims remain 1-19 of those claims claim 4-17 are drawn to a non-elected invention and have been withdrawn from consideration.
3. Claims 1-3, 18 and 19 stand rejected.

Rejections

4. Applicants' response before Final added the feature that the glass contains no Li_2O . In response, the Final rejection contained new rejections addressing eliminating the Li_2O component from the glass.

Response to Arguments

5. Applicants argue the conclusions reached on unobviousness are unreasonable as no reference teaches a glass as claimed since (a) no reference teaches having the glass claimed as having an etching rate of 0.1 $\mu\text{m}/\text{minute}$ or less when using a hydrosilicofluoric acid aqueous solution at a concentration of 1.72 % by weight and maintained at a temperature of 45

°C and (b) in combination the art does not result in teaching having no Li_2O compound in the glass.

- a. In addressing the property of etch rate at the temperature and concentration of aqueous *hydrosilicofluoric* acid, the recognition of unappreciated property in the prior art does not necessarily make claims to that property patentable¹. Etching with aqueous *hydrosilicofluoric* acid represents a reaction with the alkali glass components, these components were shown to be present and a *prima facie* case of obviousness over what has been claimed was established in the Final rejection. The rejection illustrated alkali components within applicants' range that would have reasonably been expected to have the same etch properties, or nearly so. There is no requirement the person of ordinary skill recognize a these properties and the burden has shifted to applicants to either amend the claim or make a showing establishing nonobviousness².
- b. In response to applicants' amendments to the claims eliminating Li_2O the Final rejection contained new rejections addressing the glass without Li_2O . **Nakashima et al** taught Li_2O as an ingredient for increasing Young's Modulus³. The Li_2O function is pointed out

¹ *In re Best*, 562 F.2d 1252, 1254, 195 USPQ 430, 433 (CCPA 1977)

² *Schering Corp. v. Geneva Pharm. Inc.*, 339 F.3d 1373, 1377, 67 USPQ2d 1664, 1668 (Fed. Cir. 2003)

³ Also note applicants' 7/6/2007 Response pages 6 and 7

in **Nakashima et al** col. 5 lns 18-22:

Li₂O is an essential component to increase the Young's modulus. If it is less than 1%, the above effect tends to be small. It is preferably at least 2%, more preferably at least 4%. If it exceeds 12%, T_g tends to be too high. It is preferably at most 10%, more preferably at most 8%.

As a response to

amending the claims to not include Li₂O it was pointed out eliminating a component along with its function was not an unobvious advance. Eliminating Li₂O by itself fails to make the claims patentable; there is no evidence to the contrary ⁴ for the current claim breadth.

6. Applicants have argued the newly applied **Goto et al** reference is a different glass ceramic composition containing a predominant crystal phase or phases, selected from a-cristobalite, a-cristobalite solid solution, quartz and quartz solid solution containing no Li₂O as lithium disilicate (Li₂O 2SiO₂), lithium silicate (Li₂O SiO₂) with its composition, so **Goto et al** could not render the claim to the etching rate obvious. Applicants have pointed out seven ingredients in the art arguing it was unfair to focus on only Li₂O. It's argued the rejection 'does not conclude in the argumentation in support of the rejection why only one of these components would or should be excluded and not all of them'.

⁴ Reference was made to MPEP section 2144.

- a. In response an etch rate at a temperature for a concentration of acid, though not measured by the prior art, alkali components for this etching have been shown for a *prima facie* case of obviousness. The examiner can not find any evidence to the contrary⁵ for the instant claim breadth. In further response to the arguments directed to composition, applicants have shown a limiting of alkali elution with a Young's Modulus making the glass suitable as a substrate for an information recording medium when SiO, Al₂O₃, BaO, Na₂O, K₂O, ZrO₂ components are all present in the glass. This was evident in applicants Examples summarized at specification Table 1 on specification page 39. However no claim has been considered commensurate to that composition scope. With the *prima facie* case established a burden of proof has shifted to applicants to demonstrate unobviousness for claims reasonably commensurate in scope⁶ to rebut the *prima facie* showing

CONCLUSION

- The Arguments filed 02/07/08 have been entered.
- The claims remain 1-19
- Claim 4-17, drawn to a non-elected invention, have been withdrawn from consideration.

⁵ *In re Best*, 562 F.2d 1252, 1254, 195 USPQ 430, 433 (CCPA 1977).

⁶ *In re Fitzgerald*, 619 F.2d 67, 70, 205 USPQ 594, 596; *In re Oetiker*, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444

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- Claims 1-3, 18 and 19 stand rejected.
- No claim has been allowed

INQUIRES

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Louis Falasco, PhD whose telephone number is (571)272-1507. The examiner can normally be reached on M-F 10:30 - 7:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Milton Cano can be reached at (571)272-1398. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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LF
02/08

/Carol Chaney/
Supervisory Patent Examiner, Art Unit 1794